

Determining the Impact of Demographic Factors on Adherence to Glaucoma Treatment in Patients of African Descent.

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Primary open-angle glaucoma (POAG) affects approximately 2.5 million Americans. Elevated intra-ocular pressure (IOP) is the only treatable risk factor to slow the progression of the disease and prevent blindness. Topical ocular hypotensive medications, dispensed in the form of eye drops, are the first line of treatment to reduce IOP. Patients are required to use their eye drops once or twice daily throughout the rest of their lives. Patients of African descent are more vulnerable to this chronic disease, with a prevalence six times higher than patients of European descent. They also have worse adherence to the treatment regimen in general. The main purpose of this study was to determine the impact of education, age, gender, household income, marital status, employment and number of prescribed medications on the adherence to the glaucoma treatment. Twenty-one patients were included and adherence was measured using Medication Event Monitoring System caps, which electronically record every time a patient uses their eye drops. After 4 weeks, patients returned with the caps and the compliance level was recorded. During the initial interview, patients answered a questionnaire about the different factors tested in this study. There was a positive correlation between the compliance percentage and age, with patients who are 70 years or older having the highest compliance levels (82% compared to 62% in the 50s and 60s category). Education also affected compliance, with patients who have a high school degree having a lower compliance at 62% compared to the patients with some college or a bachelor's degree with compliance of 81%. The employment status was another contributor, with higher compliance in full-time employed patients compared to other employment types. The remaining factors did not contribute to the adherence levels. Overall, education, age, and employment status were the only factors that impacted adherence levels.

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